

Remarks

In response to the Office Action dated April 8, 2008, the Applicants hereby elect, with traverse, the invention of Group I for further prosecution. It is respectfully submitted that claims 1-14 read on the elected invention. An examination of claims 1-14 in this application is hereby requested.

The Applicants respectfully traverse the restriction of claims 1-14 (Group I) with claims 15-25 (Group II) and claims 26-34 (Group III) because it would require no additional effort on the part of the Examiner to search the inventions recited in claims 15-34.

The Office Action asserts that the claims are drawn to three different bioreactors as presently claimed. The Applicants submit that as amended each of the bioreactors in claims 1, 15 and 26 contain the same or corresponding technical features. In particular, as amended claims 1, 15 and 26 each recite an inlet port and an outlet port for fluid flow of a liquid medium through a chamber wherein the liquid medium cultures or grows cells in the chamber and a gas permeable membrane allows gas flow into the chamber. As noted in the specification, the continuous perfusion of culture or growth medium helps improve mass transfer rates of cells of the tissue engineered constructs. This feature, coupled with the gas permeable membrane, provides multiple stimuli to the cells simultaneously (page 2, lines 23-27). Accordingly, the Applicants respectfully submit that the inventions of claims 1, 15 and 26 and therefore Groups I, II and III all relate to the same general inventive concept because Groups I, II and III include the special technical feature.

The Office Action further asserts that since the special technical

feature – means of growing three-dimensional tissues under controlled hydrostatic pressure differentials – are known in the prior art, the unity of inventions is broken between Groups I, II and III. The Applicants submit, however, that as amended the special technical feature recited in claims 1, 15 and 26 is not known in the prior art.

The Office Action relies upon U.S. Patent No. 6,008,049 to Naughton et al. (hereafter “Naughton”) in making this assertion. However, in the embodiment of Naughton illustrating semi-permeable membranes 28A-B (Figs. 2-3), the concentrations of solutes and nutrients flow through portions of the bioreactor that are adjacent the tissue 40 and thus Naughton does not teach fluid flow through a chamber having a gas permeable membrane where cells are grown or cultured in the chamber. Accordingly, as amended claims 1, 15, and 26 each recite the same technical feature that is not known in the art.

For these reasons, the Applicants request that the restriction requirement be withdrawn and an examination of claims 15-34 be performed with the search of the claims of Group I (i.e., claims 1-14).

Please charge any deficiency or credit any overpayment in the fees for this Election Requirement to our Deposit Account No. 20-0090.

Respectfully submitted,

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